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23 July 2007

Mr. David Bacharowski
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Comments on the Basic Environmental Conceptual Model
for the Pacoima Environmental Study Area
Pacoima, California
(EKI A20034.09)

Dear Mr. Bacharowski:

This letter provides comments on maps showing the extent of volatile organic compounds ("VOCs") released at the former Holchem site, located at 13540-13546 Desmond Street, in groundwater beneath the former Price Pfister property located at 13500 Paxton Street. These comments pertain to maps included in the Basic Environmental Conceptual Model for the Pacoima Environmental Study Area ("Conceptual Model") that was presented by the Community Redevelopment Agency of Los Angeles during a public meeting on 12 April 2007. Impacts to groundwater from releases at the former Holchem site have resulted in concentrations of VOCs in groundwater at higher concentrations and beneath a larger area than shown on the Conceptual Model Figures 3, 4, and 5. Copies of these Conceptual Model figures are enclosed in Attachment A.

The Conceptual Model figures were developed based on groundwater data from locations sampled during March and August 2006. The data used for the figures did not include well PMW-27 that was located upgradient of Price Pfister's former degreaser area, which was a source area for VOCs, and was last sampled in January 2006. As approved by the Regional Water Quality Control Board, Los Angeles Region, well PMW-27 had been abandoned because it is no longer part of the required quarterly groundwater monitoring program at the Price Pfister site. More recently, Price Pfister collected additional data that helps define the extent of VOCs in groundwater from the Holchem site. In April 2007, groundwater samples were collected at locations PPGW-1, PPGW-7, and PPGW-11 (see Figures 1, 2, and 3). The inclusion of data from PMW-27, PPGW-1, PPGW-7, and PPGW-11 shows that the groundwater area impacted by VOCs from the former Holchem site is larger than shown on the Conceptual Model Figures 3, 4, and 5.

Upgradient VOCs Impact Groundwater at the Former Price Pfister Degreaser Area

VOCs in groundwater from the Holchem Site have impacted groundwater upgradient of the former Price Pfister degreaser VOC source area (i.e., near to and downgradient of well PMW-37) at concentrations that exceed maximum contaminant levels ("MCLs"). However, the

Conceptual Model figures do not show the impact of Holchem's VOCs to groundwater beneath this area. As explained below, the area of the Holchem VOC groundwater plume should be shown to overlap with the plume from the former Price Pfister site for tetrachloroethene ("PCE") and trichloroethene ("TCE").

As indicated on EKI Figures 1 and 2, the addition of data from former well PMW-27 shows that in January 2006 PCE was present in groundwater upgradient of the former Price Pfister degreaser area at a concentration of 18 micrograms per liter ("ug/L") (MCL[1] is 5 ug/L) and TCE was present at a concentration of 4.4 ug/L (MCL is 5 ug/L). Although more recent groundwater data are not available for well PMW-27, both PCE and TCE are likely present at similar concentrations based on prior sampling events. Nine groundwater samples were collected from well PMW-27 from 2004 through January 2006 and PCE and TCE were detected every time. As presented on Figures 1 and 2, the PCE concentrations ranged from 18 ug/L to 45 ug/L and the TCE concentration ranged from 4.4 ug/L to 9.9 ug/L.

As a consequence of adding well PMW-27 to the VOC plume maps, the illustration of the VOC plumes for PCE and TCE on Figures 1 and 2 show how the large Holchem TCE and PCE plumes overlap with the smaller Price Pfister VOC plume. The cis-1,2-DCE plume from the Holchem site appears to be narrower than the Holchem TCE and PCE plumes. A potential explanation for the narrow plume may be that cis-1,2-DCE forms in anaerobic conditions at a location downgradient of the Holchem PCE and TCE release locations. The Price Pfister plume does not have a cis-1,2- DCE signature.

Sampling results from Holchem well MW-13, located along Paxton Street, provide data that support the finding that the Holchem VOC plume impacts groundwater beneath the former Price Pfister degreaser area. As shown on Figures 1, 2, and 3, groundwater from well MW-13 located on Paxton Street has PCE at 63 ug/l, TCE at 87 ug/l, and cis-1,2-DCE at 2.9 ug/l, respectively. The nearest well with data that defines VOC concentrations northeast of MW-13 is Holchem well PF-1A more than 500 feet away.[2]

Larger Area of Upgradient VOCs at Ten Times the MCL

Impacts to groundwater from the former Holchem site have resulted in concentrations of VOCs in groundwater exceeding ten times their MCL beneath a larger area than shown on the Conceptual Model figures.

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[1] Maximum Contaminant Level ("MCL"), California Code of Regulations, Title 22, Division 4 Environmental Health, Section 64444

[2] Wells MW-11 and MW-12 located near well MW-13 are deep wells screened and sampled 25 to 50, and 37 to 57 feet below the water table respectively, whereas, the other wells used for the VOC plume map are shallower and are screened across the water table. Due to the difference in sampling depth, the groundwater data from the deep wells are not directly comparable to data from the shallower wells.

Analytical results for recently collected groundwater samples at PPGW-1, PPGW-7, and PPGW-11 suggest that the area of groundwater with VOC concentrations greater than ten times MCLs is wider beneath the western part of the former Price Pfister site than shown on the Conceptual Model figures. The area of groundwater with VOCs exceeding ten times MCLs appears to extend to the vicinity near Sutter Street for PCE and TCE as well as cis-1,2-DCE.

The Holchem PCE and TCE plumes in groundwater at concentrations exceeding ten times their MCL appear too narrow on Conceptual Model Figures 1 and 2 based on data from Holchem wells MW-10, MW-13, MW-14 and PF-2A. Because they sample deeper groundwater, wells MW-11 and MW-12 do not provide comparable data and therefore are not useful to determine the width of the VOC plume.

Please contact us if you have questions about the information presented herein.

Very truly yours,

ERLER & KALINOWSKI, INC.

Steven G. Miller, P.E.
Project Manager

cc: Mohammad Zaidi, RWQCB
Wendy Phillips, RWQCB
Linda Biagioni, Black & Decker
Lorraine Sedlak, Black & Decker
Eileen Nottoli, Allen Matkins

Enclosures:

Figure 1 - PCE in Groundwater
Figure 2 – TCE in Groundwater
Figure 3 – cis-1,2-DCE in Groundwater

Attachment A – Figures 3, 4, and 5 of the Pacoima Environmental Study Area Basic Environmental Model presented by the Community Redevelopment Agency of Los Angeles on 12 April 2007.

Data Not Used For Contouring Because These Wells Are Screened Below The Water Table

PMW-27	
Sample Date	PCE (µg/L)
2/10/2004	45
5/12/2004	32
8/5/2004	34
10/7/2004	36
1/12/2005	41
4/6/2005	33
7/7/2005	33
10/6/2005	22
1/10/2006	18

DESMOND STREET
PAXTON STREET
BRADLEY AVENUE
SUTTER AVENUE
LOUVRE STREET
PALA STREET
RALSTON STREET
FILLMORE
FORMER HOLCHEM
FORMER PRICE PFISTER
D & M STEEL

MW-2 2.2
MW-3 13
OW-2 4.2
2.3 MW-7
MW-8 4.9
MW-4 3.8
MW-9 2.3
MW-6 5.7
MW-1 30
OW-1 5.6
MW-5 1.5
PF-1A <1.0
2.8 MW-12
53 MW-13
1.4 MW-11
PMW-27
MW-10 41
PF-2A 96
MW-14 4.5
PMW-37 61
PPGW-1 26
PMW-11 22
PMW-38 29
MW-15 14
8.4 GW-2
16 GW-1
3.8 GW-3
PMW-15 4.4
MW-5 49
MW-4 6.6
PPGW-1 34
MW-6 9.1
PMW-14 8.3
3.6 LFR-3
MW-16 13
MW-7 7
PMW-9 12
35 LFR-1
16 LFR-2
MW-8 18
PPGW-7 77
PMW-20 2.1
16 GW-1
29 GW-3
57 GW-2
PMW-13 29
PMW-19 3.6

5
50

Legend:

- Groundwater Monitoring Well (at water table)
- Groundwater Monitoring Well (below water table)
- Temporary Monitoring Well (at water table)
- >5 µg/L
- >50 µg/L
- Interpreted Fault Zone
- Boundary of Groundwater Anomaly

Notes:

1. All locations are approximate.
2. Concentration contours are based on March and April 2006 data plus January 2006 data for PMW-27 and April 2007 data for PPGW-1, PPGW-7, and PPGW-11.

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PCE in Groundwater

N

0 200 400

(Approximate Scale in Feet)

13500 Paxton Street
Pacoima, CA
July 2007
EKI A20034.03

Figure 1

G:\A20034.03\Jul07\CDM\Figure 01 - CDM PCE.dwg 7-19-07

Data Not Used For Contouring Because These Wells Are Screened Below The Water Table

DESMOND STREET

PAXTON STREET

BRADLEY AVENUE

SUTTER AVENUE

LOUVRE STREET

PALA STREET

RALSTON STREET

FORMER HOLCHEM

FORMER PRICE PFISTER

D & M STEEL

<1 MW-2

34 MW-3

OW-2 <1

1.4 MW-8

<1 MW-7

MW-4 12

51 MW-6

MW-9 <1

97 MW-1

OW-1 1.0

1.0 MW-5

<1 PF-1A

5

50

87 MW-13

<1 MW-12

PMW-27

1.1 MW-11

110 PF-2A

75 MW-10

1.9 PMW-37

<1 PMW-11

11 MW-14

8.1 PPGW-1

7.1 PMW-38

16 GW-2

15 MW-15

31 GW-1

18 GW-3

27 PPGW-11

6.6 MW-5

<1 MW-4

<1 PMW-15

1.1 MW-6

2.8 LFR-3

13 MW-16

8.4 PMW-9

<1 MW-7

3.1 PMW-

24 LFR-1

14 LFR-2

90 PPGW-7

3.5 MW-8

15 GW-1

32 GW-3

45 GW-2

6.3 PMW-13

<1 PMW-20

2 PMW-19

PMW-27	
Sample Date	TCE (µg/L)
2/10/2004	9.9
5/12/2004	6.7
8/5/2004	6.6
10/7/2004	6.7
1/12/2005	8.8
4/6/2005	7
7/7/2005	6.6
10/6/2005	5
1/10/2006	4.4

Legend:

- Groundwater Monitoring Well (at water table)
- Groundwater Monitoring Well (below water table)
- Temporary Monitoring Well (at water table)
- >5 µg/L
- >50 µg/L
- Interpreted Fault Zone
- Boundary of Groundwater Anomaly

Notes:

1. All locations are approximate.
2. Concentration contours are based on March and April 2006 data plus January 2006 data for PMW-27 and April 2007 data for PPGW-1, PPGW-7, and PPGW-11.

N

0 200 400

(Approximate Scale in Feet)

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TCE in Groundwater

13500 Paxton Street
Pacoima, CA

July 2007
EKI A20034.03

Figure 2

G:\A20034.03\Jul07\CDM\Figure 02 - CDM TCE_.dwg 7-19-07

Data Not Used For Contouring Because These Wells Are Screened Below The Water Table

DESMOND STREET

FORMER HOLCHEM

MW-2 <1

MW-3 1.8

OW-2 <1

MW-8 <1

MW-7 <1

MW-4 <1

MW-9 <1

MW-6 81

OW-1 <1

MW-5 <1

MW-1 530

PAXTON STREET

PF-1A <1

PMW-27	
Sample Date	cis-1,2-DCE (µg/L)
2/10/2004	<1
5/12/2004	<1
8/5/2004	<1
10/7/2004	<1
1/12/2005	<1
4/6/2005	<1
7/7/2005	<1
10/6/2005	<1
1/10/2006	<1

MW-12 <1

MW-13 2.9

PMW-27

MW-11 1.1

PF-2A 2,300

MW-10 8.0

FORMER PRICE PFISTER

BRADLEY AVENUE

PMW-12

PMW-37 <1

PMW-11 <1

MW-14 <1

2 PPGW-1

6

60

600

600

60

6

PMW-38 6

MW-15 3.6

<1 GW-2

<1 GW-1

<1 GW-3

5.8 PPGW-11

MW-5 4.2

MW-4 <1

PMW-15 <1

SUTTER AVENUE

MW-6 <1

PMW-14 <1

PALA STREET

<1 LFR-3

MW-16 460

330 LFR-1

PMW-9 1.5

MW-7 <1

LOUVRE STREET

MW-8 <1

20 LFR-2

430 PPGW-7

15 GW-1

900 GW-3

930 GW-2

PMW-13 7.6

RALSTON STREET

PMW-20 <1

B & M STEEL

PMW-19 <1

Legend:

- Groundwater Monitoring Well (at water table)
- Groundwater Monitoring Well (below water table)
- Temporary Monitoring Well (at water table)
- >6 µg/L
- >60 µg/L
- >600 µg/L
- Interpreted Fault Zone
- Boundary of Groundwater Anomaly

Notes:

1. All locations are approximate.
2. Concentration contours are based on March and April 2006 data plus January 2006 data for PMW-27 and April 2007 data for PPGW-1, PPGW-7, and PPGW-11.

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cis-1,2-DCE in Groundwater

N

0 200 400

(Approximate Scale in Feet)

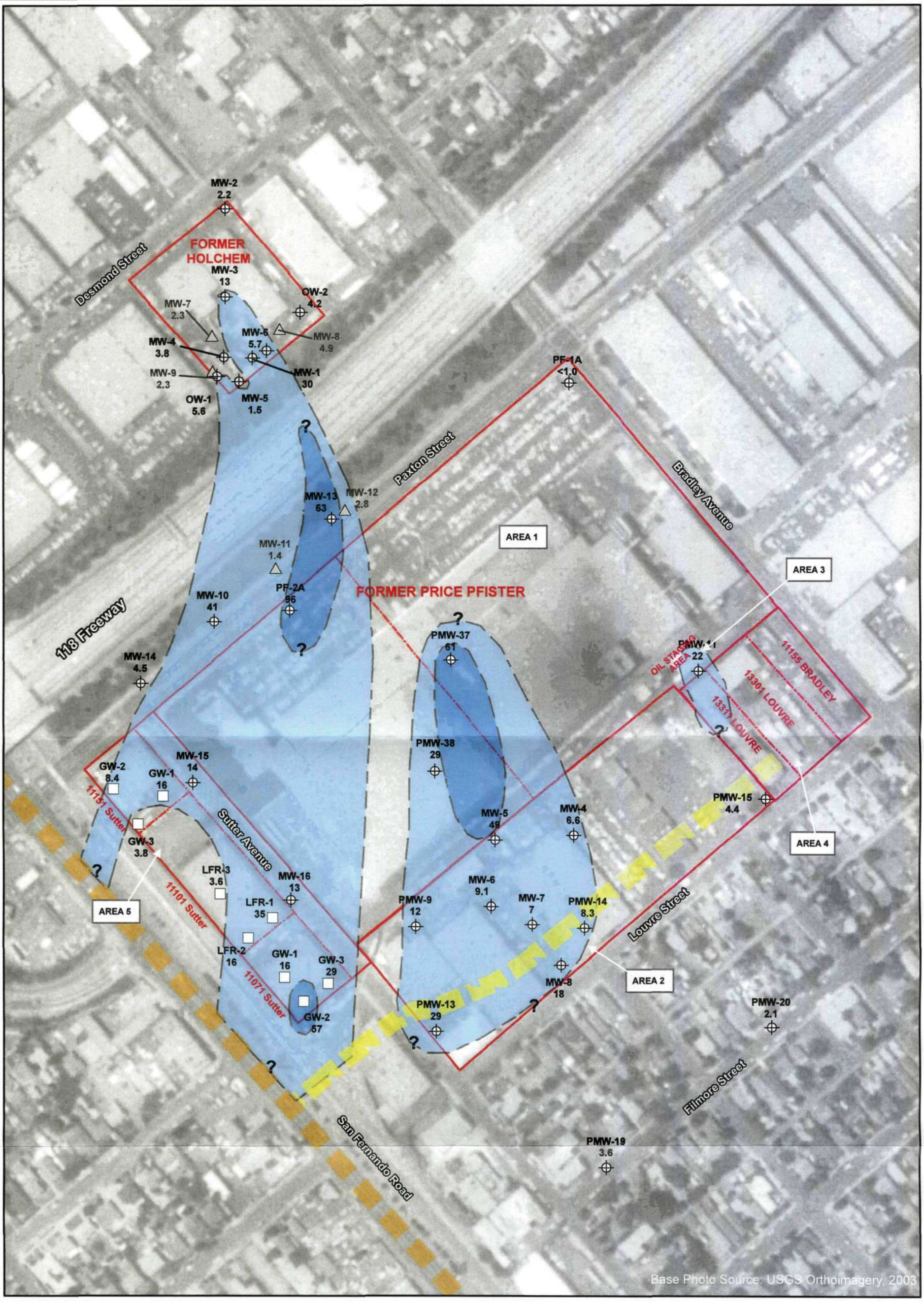
13500 Paxton Street
Pacoima, CA
July 2007
EKI A20034.03

Figure 3

G:\A20034.03\Jul07\CDM\Figure 03 - CDM cis-1,2-DCE_.dwg 7-19-07

ATTACHMENT A

FIGURES 3, 4, AND 5 OF THE PACOIMA ENVIRONMENTAL STUDY AREA BASIC ENVIRONMENTAL MODEL



Legend

Approximate Well Location

- Monitoring Well
- Monitoring Well Screened Below Water Table
- Temporary Monitoring Well
- 41 **PCE Concentrations in Groundwater (µg/L)**
- Boundary of Groundwater Anomaly
- Interpreted Fault Zone

Approximate Extent of PCE

- >5 µg/L
- >50 µg/L

0 100 200 400 Feet

Approximate Scale

N

Notes: All data made available by the California Department of Toxic Substances Control (DTSC), the Los Angeles Reqional Water Quality Control Board (LARWQCB), and developer (Primstor).
1. Areas 1, 2, 3, data from Erler & Kalinowski, Quarterly Monitoring and Remediation Progress Report, Third Quarter 2006
2. Area 5 data from LFR, Phase I/II for 11151 Sutter Avenue, March 30 2006.
3. Holchem data from Arcadis, Third Quarter 2006 Groundwater Monitoring Report and SVE System Update.
4. Fault Zone interpretation based on Erler & Kalinowski, Remedial Investigation Report, Figure 6, February 7, 2003.
5. Data from monitor wells screened below the water table not used herein.

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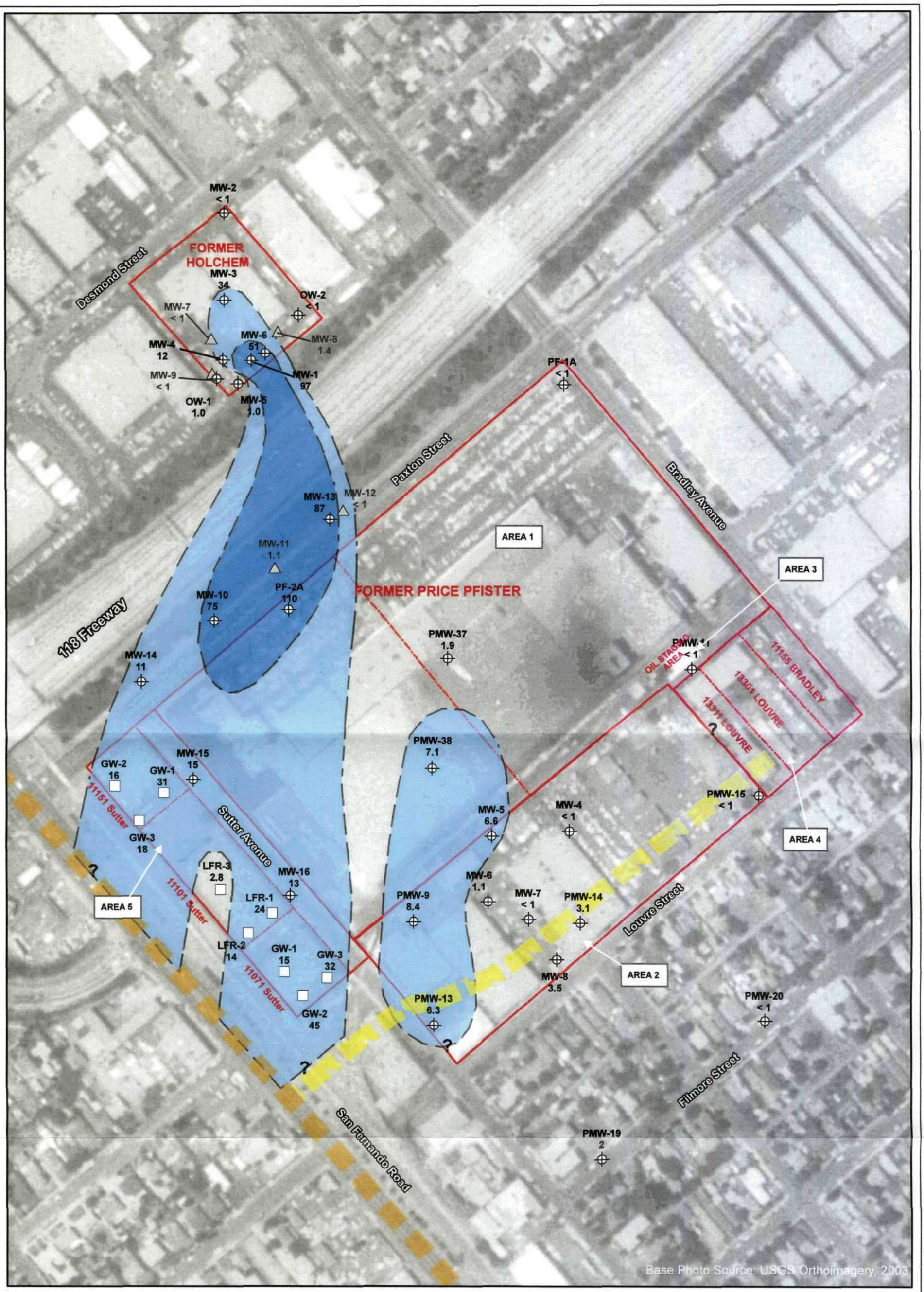
PCE in Groundwater, March and August, 2006

Figure 3



Legend

Approximate Well Location

- Monitoring Well
- Monitoring Well Screened Below Water Table
- Temporary Monitoring Well
- 41 **TCE Concentrations in Groundwater (µg/L)**
- Boundary of Groundwater Anomaly
- Interpreted Fault Zone

Approximate Extent of TCE

- >5 µg/L
- >50 µg/L

0 100 200 400 Feet

Approximate Scale

N

Notes: All data made available by the California Department of Toxic Substances Control (DTSC), the Los Angeles Regional Water Quality Control Board (LARWQCB), and developer (Primstor).
1. Areas 1, 2, 3, data from Erler & Kalinowski, Quarterly Monitoring and Remediation Progress Report, Third Quarter 2006
2. Area 5 data from LFR, Phase I/II for 11151 Sutter Avenue, March 30 2006.
3. Holchem data from Arcadis, Third Quarter 2006 Groundwater Monitoring Report and SVE System Update.
4. Fault Zone interpretation based on Erler & Kalinowski, Remedial Investigation Report, Figure 6, February 7, 2003.
5. Data from monitor wells screened below the water table not used herein.

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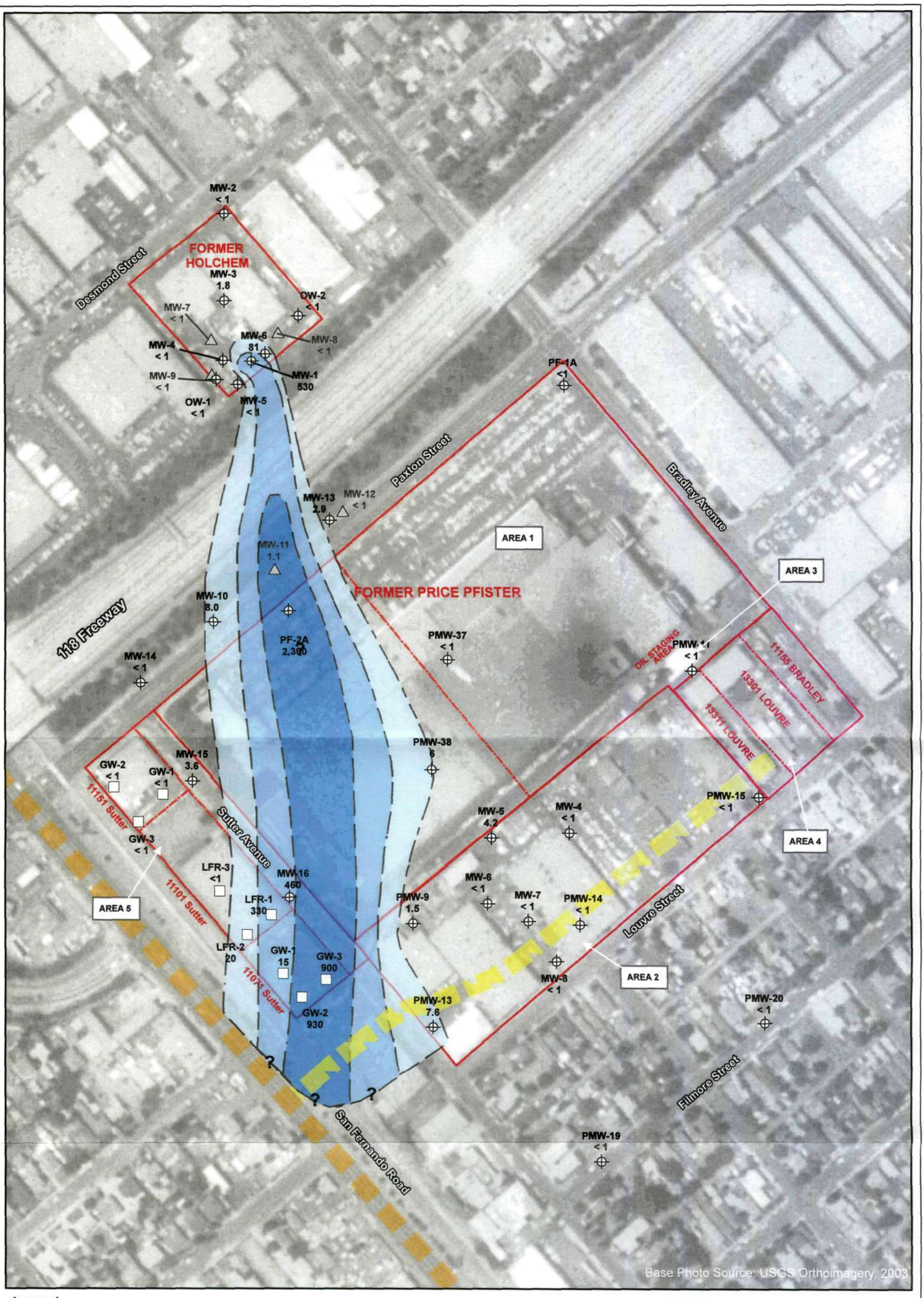
Pacoima Redevelopment Project and Cleanup Project

TCE in Groundwater, March and August, 2006

Figure 4



Legend

Approximate Well Location

- Monitoring Well
- Monitoring Well Screened Below Water Table
- Temporary Monitoring Well
- 41 **1,2-DCE Concentrations in Groundwater (µg/L)**
- Boundary of Groundwater Anomaly
- Interpreted Fault Zone

Approximate Extent of 1,2-DCE

- >6 µg/L
- >60 µg/L
- >600 µg/L

0 100 200 400 Feet

Approximate Scale

N

Notes: All data made available by the California Department of Toxic Substances Control (DTSC), the Los Angeles Regional Water Quality Control Board (LARWQCB), and developer (Primstor).
1. Areas 1, 2, 3, data from Erler & Kalinowski, Quarterly Monitoring and Remediation Progress Report, Third Quarter 2006
2. Area 5 data from LFR, Phase I/II for 11151 Sutter Avenue, March 30 2006.
3. Holchem data from Arcadis, Third Quarter 2006 Groundwater Monitoring Report and SVE System Update.
4. Fault Zone interpretation based on Erler & Kalinowski, Remedial Investigation Report, Figure 6, February 7, 2003.
5. Data from monitor wells screened below the water table not used herein.

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1,2-DCE in Groundwater, March and August, 2006

Figure 5